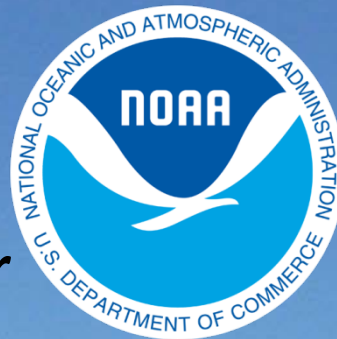


# BookletChart™

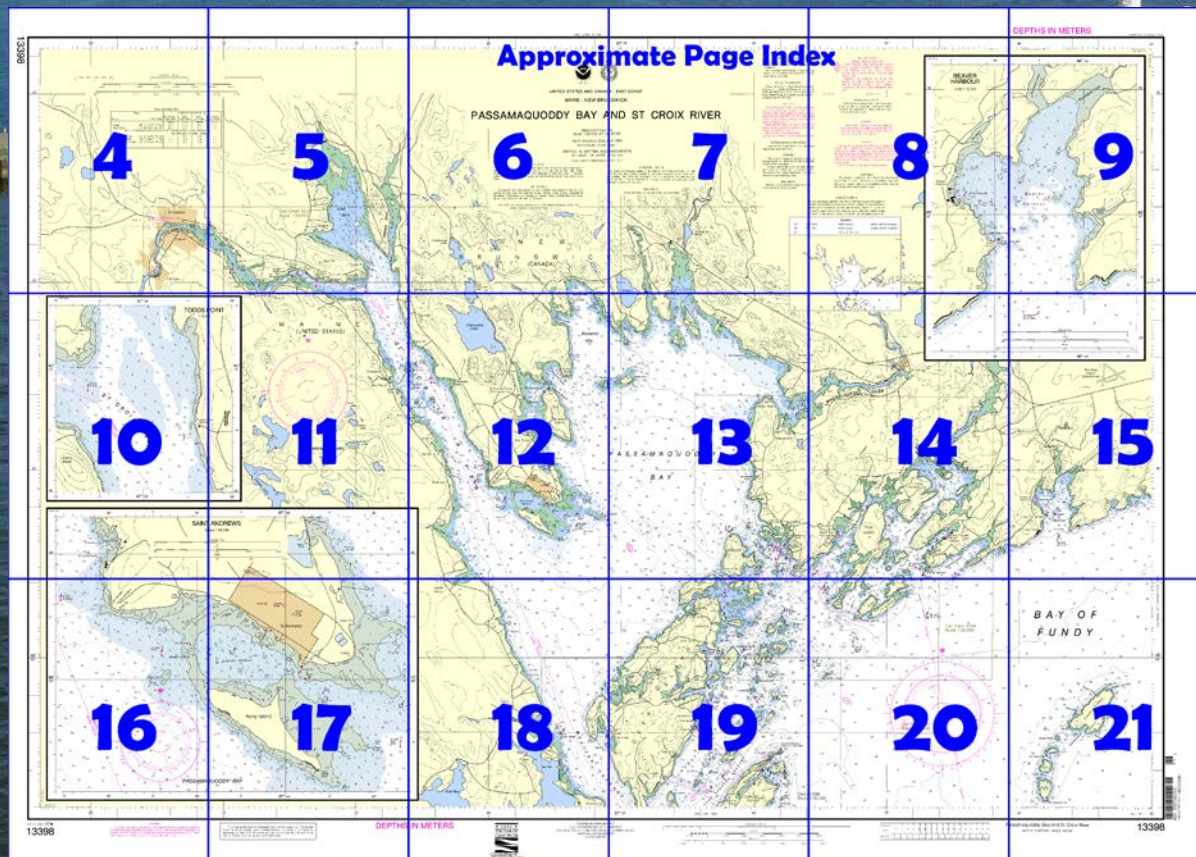
## Passamaquoddy Bay and St. Croix River NOAA Chart 13398



*A reduced-scale NOAA nautical chart for small boaters*  
*When possible, use the full-size NOAA chart for navigation.*



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the**  
**National Oceanic and Atmospheric Administration**  
**National Ocean Service**  
**Office of Coast Survey**  
[www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov)  
**888-990-NOAA**

### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=13398>.



### (Selected Excerpts from Coast Pilot)

The approaches to St. Croix River include Quoddy Narrows, Lubec Channel, Friar Roads, Head Harbour Passage, Western Passage, and Passamaquoddy Bay. The principal entrance is around the northern end of Campobello Island through Head Harbour Passage. This passage is deep and generally clear of dangers. The channel through Lubec Narrows is also used, especially at high water. The tidal currents are strong in both passages.

**West Quoddy Head**, the easternmost point of the United States, is bold and wooded. **West Quoddy Head Light** (44°48'54"N., 66°57'02"W.), 83 feet above the water, is shown from a 49-foot red and white horizontally

banded tower on the eastern edge of the headland. A sound signal is at the light. The abandoned Coast Guard lookout tower near the summit of the ridge westward of the light is the most conspicuous landmark in the approach to Quoddy Narrows from seaward.

Between West Quoddy Head and Calais, fluorescent red pyramidal markers define straight line segments and turning points of the United States-Canada boundary.

**Quoddy Narrows (Quoddy Roads)**, between West Quoddy Head and Canada's Campobello Island, is the usual anchorage for vessels seeking shelter or waiting for a favorable tide to pass through Lubec Narrows. The entrance, between West Quoddy Head and The Boring Stone, is about 0.8 mile wide and has a depth of 28 feet near the middle. Winds from east to south generate rough seas in the entrance.

The anchorage affords shelter from northerly and westerly winds in depths of 12 to 25 feet, but is open to winds from the east and south, and protection from northeast gales is reported poor. The northern and western parts of Quoddy Narrows between West Quoddy Head and Lubec are full of shoals which partly uncover.

**Sail Rock** and **Little Sail Rock** are two bare rocks on a ledge about 0.2 mile southeastward of West Quoddy Head Light. The ledge extends more than 100 yards east of the two rocks. As swirls form just southward and eastward of Sail Rock during the strength of the tidal current, the rock should be given a good berth. A lighted whistle buoy is about 0.4 mile southeastward of Sail Rock, about in line with the rock and West Quoddy Head Light. A fairway bell buoy, about 0.5 mile north-northeastward of the light, marks the entrance to Quoddy Narrows and the approach to Lubec Channel.

**Round Rock**, which uncovers, and **The Boring Stone**, 5 feet high and bare, are 500 yards southwest of **Liberty Point**, a bold headland, which is the southern extremity of Campobello Island. Vessels should pass at least 300 yards off the southernmost rock. An islet about 200 yards off Liberty Point is conspicuous, as is **Ragged Point** about 0.4 mile northeastward of it.

**Wormell Ledges**, which partly uncover, are about 400 yards northward of West Quoddy Head, and are marked at their northern end by a buoy.

**Middle Ground**, covered 4 feet, is a shoal in the middle of Quoddy Narrows, 0.7 mile north-northwest of West Quoddy Head, and is marked on its southwestern side by a buoy.

**Lubec Channel** and **Lubec Narrows**, between Quoddy Narrows and Friar Roads, have been improved by dredging. In 2002, the controlling depth was 9 feet (11.7 feet at midchannel). The channel is marked by a light and buoys. At spring tides the low water may be 3 or 4 feet below the average. Lubec Narrows has strong tidal currents and eddies. It is not advisable to use this passage without local knowledge.

Shoals bare on both sides of Lubec Narrows at low water. A breakwater extends from **Short Point** on the west side of the channel about 300 yards northward of **Mowry Point**, on the southwest side of the narrows. The **Franklin D. Roosevelt Memorial Highway Bridge** crosses the narrows from Lubec to Campobello Island at a point about 400 yards southward of the abandoned lighthouse on **Mulholland Point**. Another breakwater extends from the shore to **Gun Rock** and 75 yards eastward of the rock on the west side of the channel at the north end of the narrows. This breakwater is marked by a white pyramid midway of its length. The breakwater covers at extreme high water. A ledge extending about 150 yards north-northeasterly from Gun Rock has 7 feet over it and is marked on its north end by a buoy.

### U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Boston	Commander	
	1st CG District	(617) 223-8555
	Boston, MA	



# Navigation Managers Area of Responsibility



**NOAA's navigation managers** serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit [nauticalcharts.noaa.gov/service/navmanagers](http://nauticalcharts.noaa.gov/service/navmanagers)

To make suggestions or ask questions online, go to [nauticalcharts.noaa.gov/inquiry](http://nauticalcharts.noaa.gov/inquiry).

To report a chart discrepancy, please use [ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx](http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx).

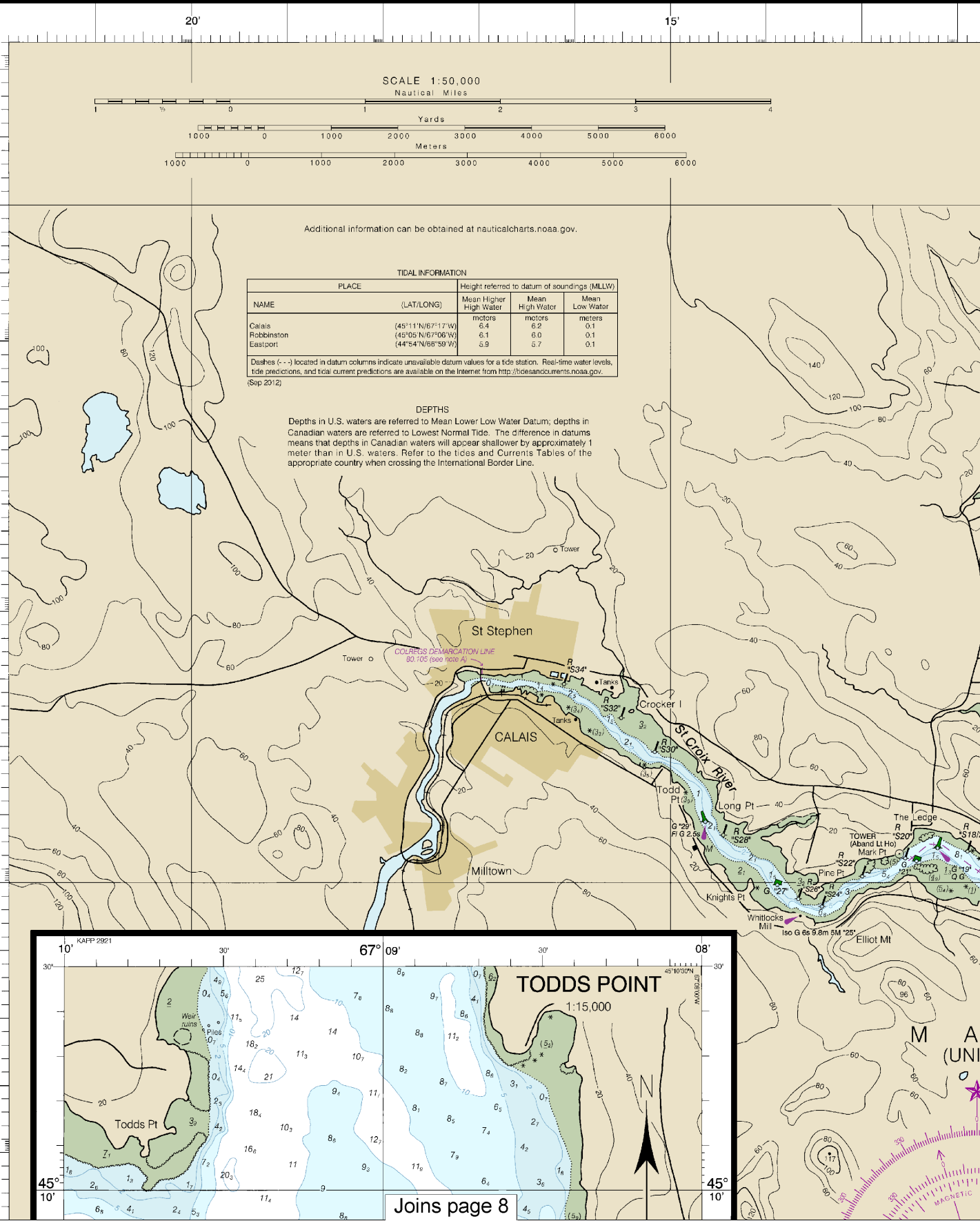
## Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>

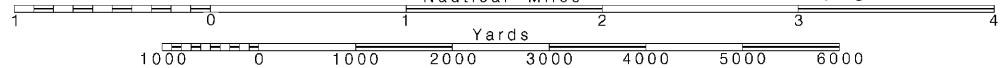


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:50,000  
Nautical Miles

See Note on page 5.





UNITED STATES AND CANADA  
MAINE - NEW BRUNSWICK

# PASSAMAQUODDY BAY

Mercator Projection  
Scale 1:50,000

North American Datum  
(World Geodetic System 1984)

DEPTHS IN METERS  
AT MEAN LOWER LOW WATER  
AT LOWEST NORMAL TIDE

For Symbols and Abbreviations, see BookletChart 1

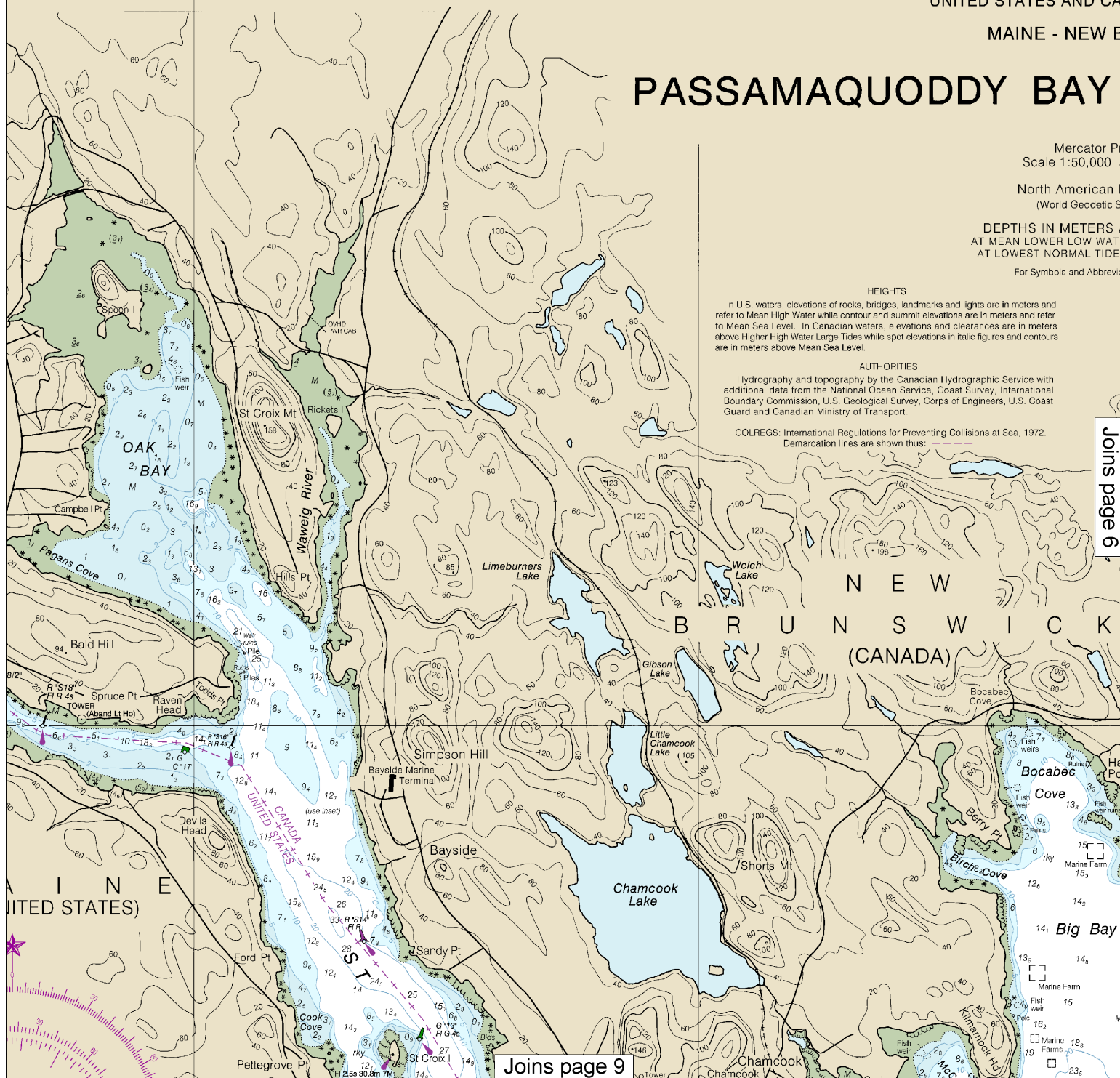
## HEIGHTS

In U.S. waters, elevations of rocks, bridges, landmarks and lights are in meters and refer to Mean High Water while contour and summit elevations are in meters and refer to Mean Sea Level. In Canadian waters, elevations and clearances are in meters above Higher High Water Large Tides while spot elevations in italic figures and contours are in meters above Mean Sea Level.

## AUTHORITIES

Hydrography and topography by the Canadian Hydrographic Service with additional data from the National Ocean Service, Coast Survey, International Boundary Commission, U.S. Geological Survey, Corps of Engineers, U.S. Coast Guard and Canadian Ministry of Transport.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.  
Demarcation lines are shown thus: ---



Joins page 6

Joins page 9

This BookletChart was reduced to 70% of the original chart scale.  
The new scale is 1:71428. Barscales have also been reduced and  
are accurate when used to measure distances in this BookletChart.

67°

55'



AND CANADA - EAST COAST

- NEW BRUNSWICK

## BAY AND ST CROIX RIVER

Mercator Projection  
Scale 1:50,000 at Lat. 45°05'

American Datum of 1983  
World Geodetic System 1984)

METERS AND DECIMETERS  
FOR LOW WATER IN U.S. WATERS AND  
NORMAL TIDE IN CANADIAN WATERS  
Units and Abbreviations see Chart No. 1

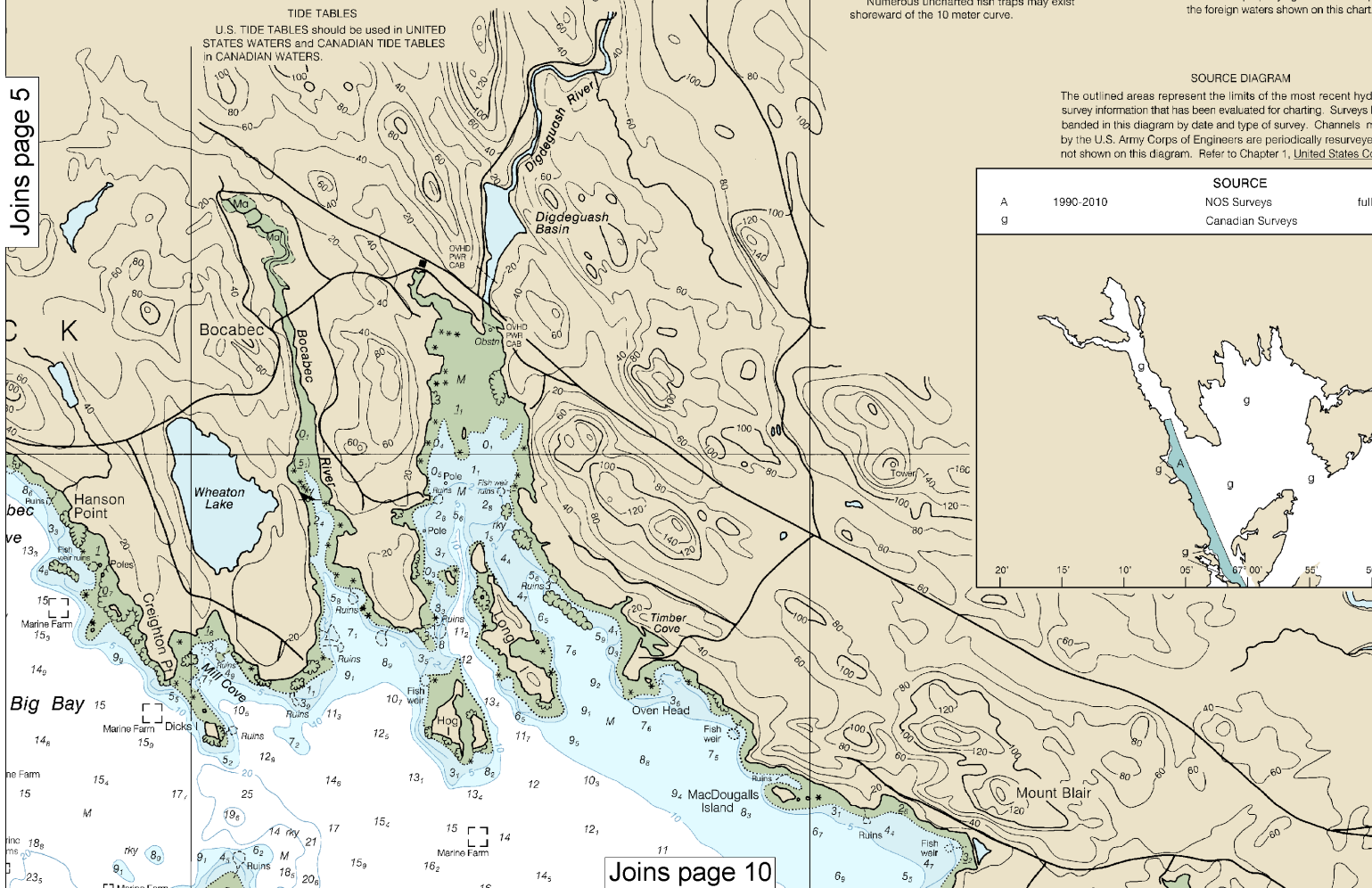
## HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.274" northward and 2.044" eastward to agree with this chart.

## TIDE TABLES

U.S. TIDE TABLES should be used in UNITED STATES WATERS and CANADIAN TIDE TABLES in CANADIAN WATERS.

Joins page 5



Joins page 10

## AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

## POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

## NOTE C

Mariners are cautioned that ferries may deviate from their published standard routes due to inclement weather, traffic conditions, navigational hazards, or other emergency situations.

## NOTE D

FIRING PRACTICE AND EXERCISE AREAS  
Limits of Canadian Firing Practice and Exercise Areas. See Canadian Notice to Mariners No. 35 of each year.

## SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 1 and Canadian Sailing Directions, Nova Scotia (SE Coast) and Bay of Fundy, for important supplemental information.

## CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details, see U.S. Coast Guard Light List.

## FISH TRAPS

Numerous uncharted fish traps may exist shoreward of the 10 meter curve.

## BAY OF FUNDY

## VESSEL TRAFFIC SERVICES

Traffic Services calling in by arrow indicates direction of vessel. The international boundary of Canada's Bay of Fundy Vessel Traffic Services zone. Vessels must report on the zone.

For additional information on Vessel Traffic Services see the Canadian publication Marine Navigation (Atlantic, St. Lawrence, Lake Winnipeg and Eastern Lakes).

## RADAR REFLECTORS

Radar reflectors have been placed on floating aids to navigation. If reflector identification on these aids is omitted from this chart.

## WARNING

The prudent mariner will not rely on any single aid to navigation, floating aids. See U.S. Coast Pilot and U.S. Coast Pilot for details.

## NOTE A

Navigation regulations are published in Coast Pilot 1. Additions or revisions to the regulations may be obtained at the request of the District Engineer, U.S. Coast Guard District Office, Concord, MA. Refer to charted regulation section.

## COPYRIGHT

No copyright is claimed by the United States Government. However, other intellectual property rights on the compilation of the foreign waters shown on this chart.

## SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys conducted in this diagram by date and type of survey. Channels marked by the U.S. Army Corps of Engineers are periodically resurveyed and shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE		
A	1990-2010	NOS Surveys full
g		Canadian Surveys

6

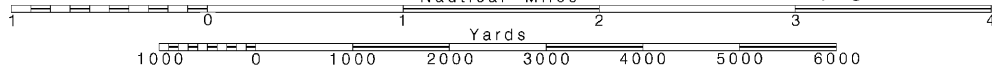
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:50,000

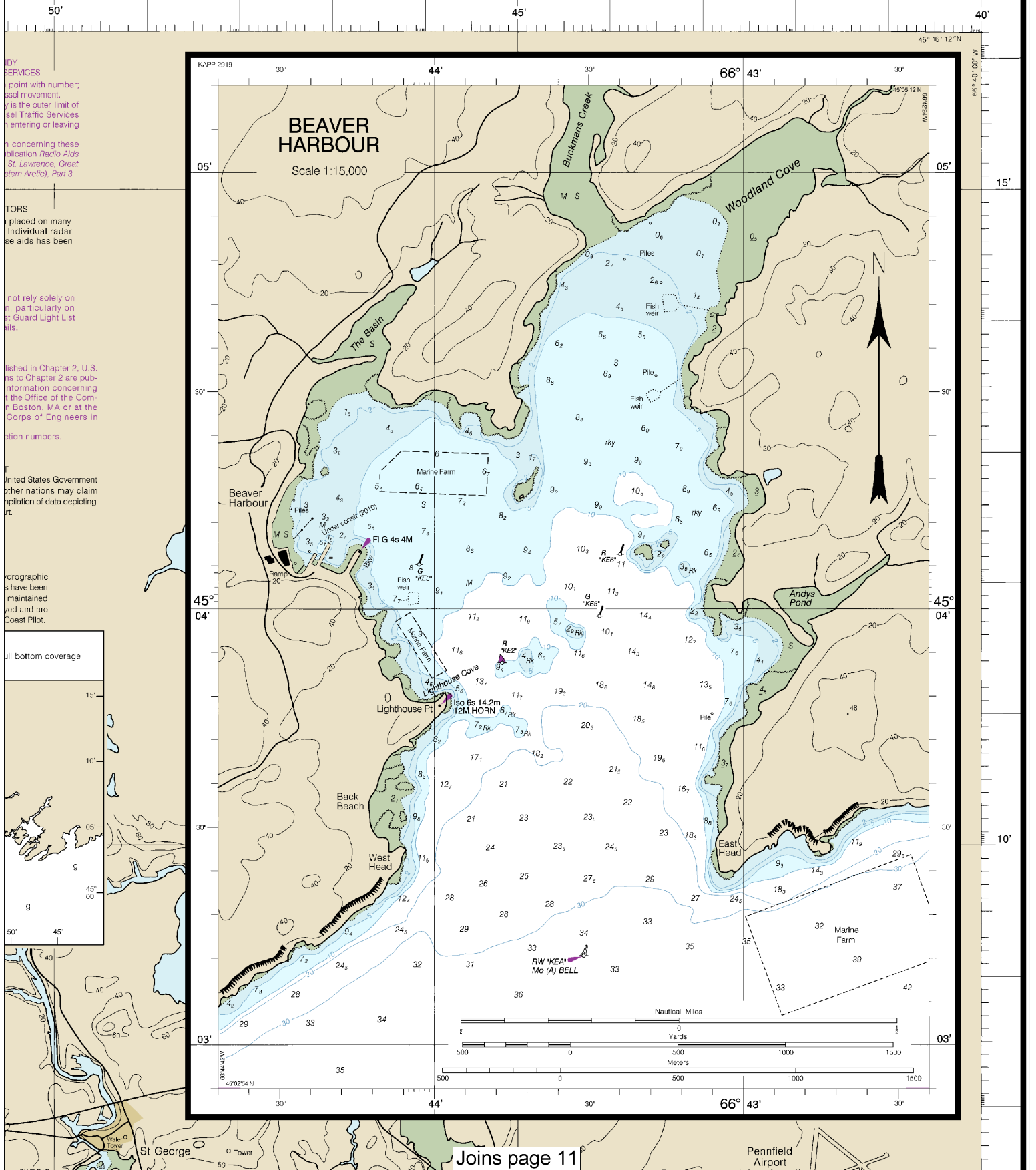
Nautical Miles

See Note on page 5.



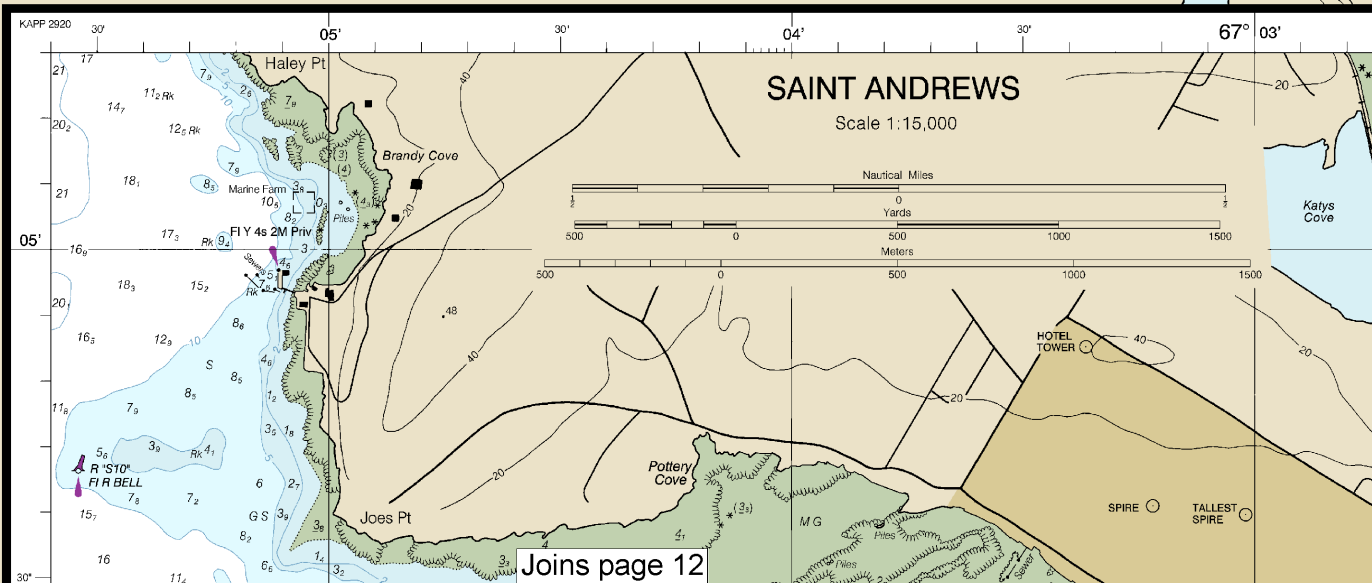
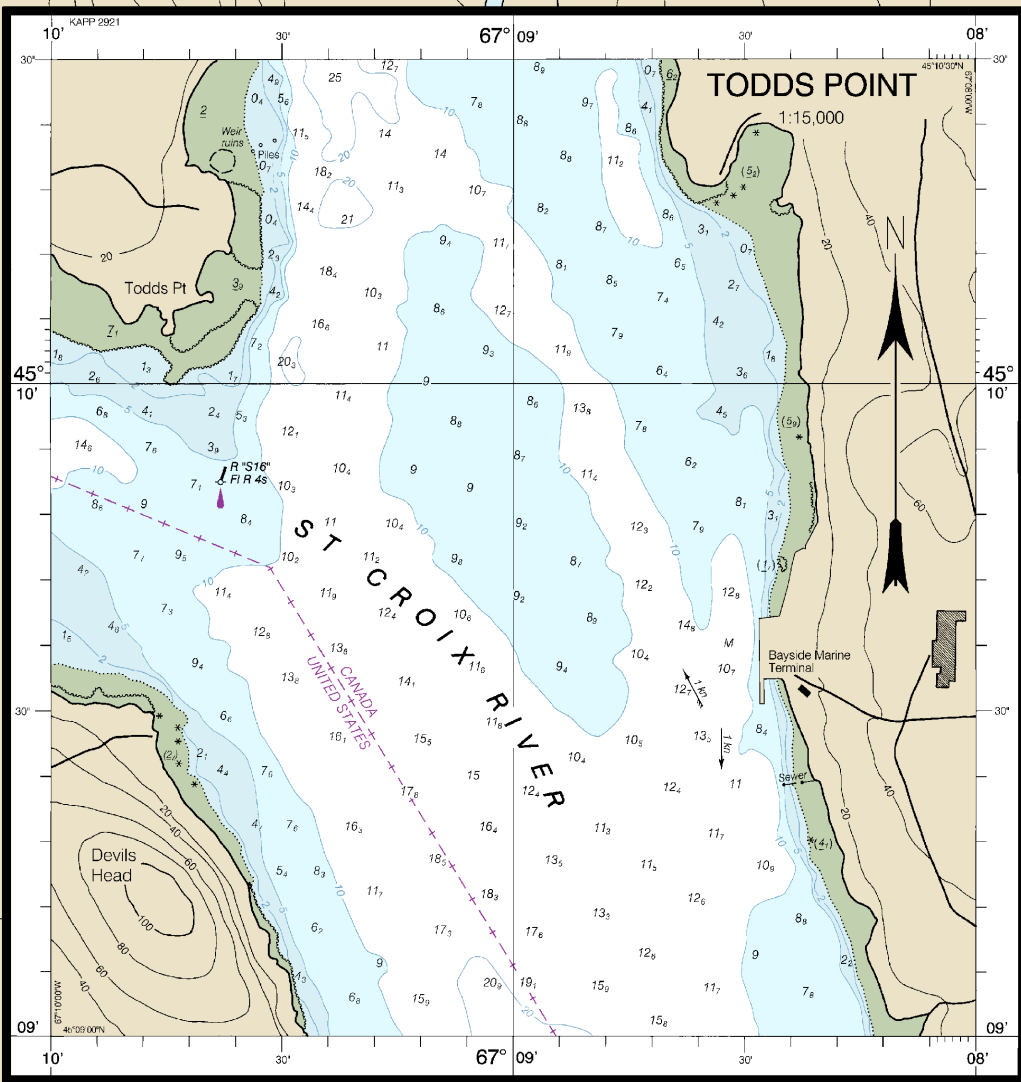


# DEPTHS IN METERS



Last Correction: 3/7/2016. Cleared through:  
LNM: 2516 (6/21/2016), NM: 2716 (7/2/2016), CHS: 0616 (6/24/2016)

Joins page 4



Joins page 12

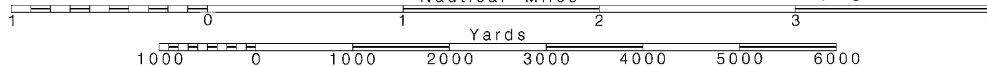
8

Note: Chart grid lines are aligned with true north.

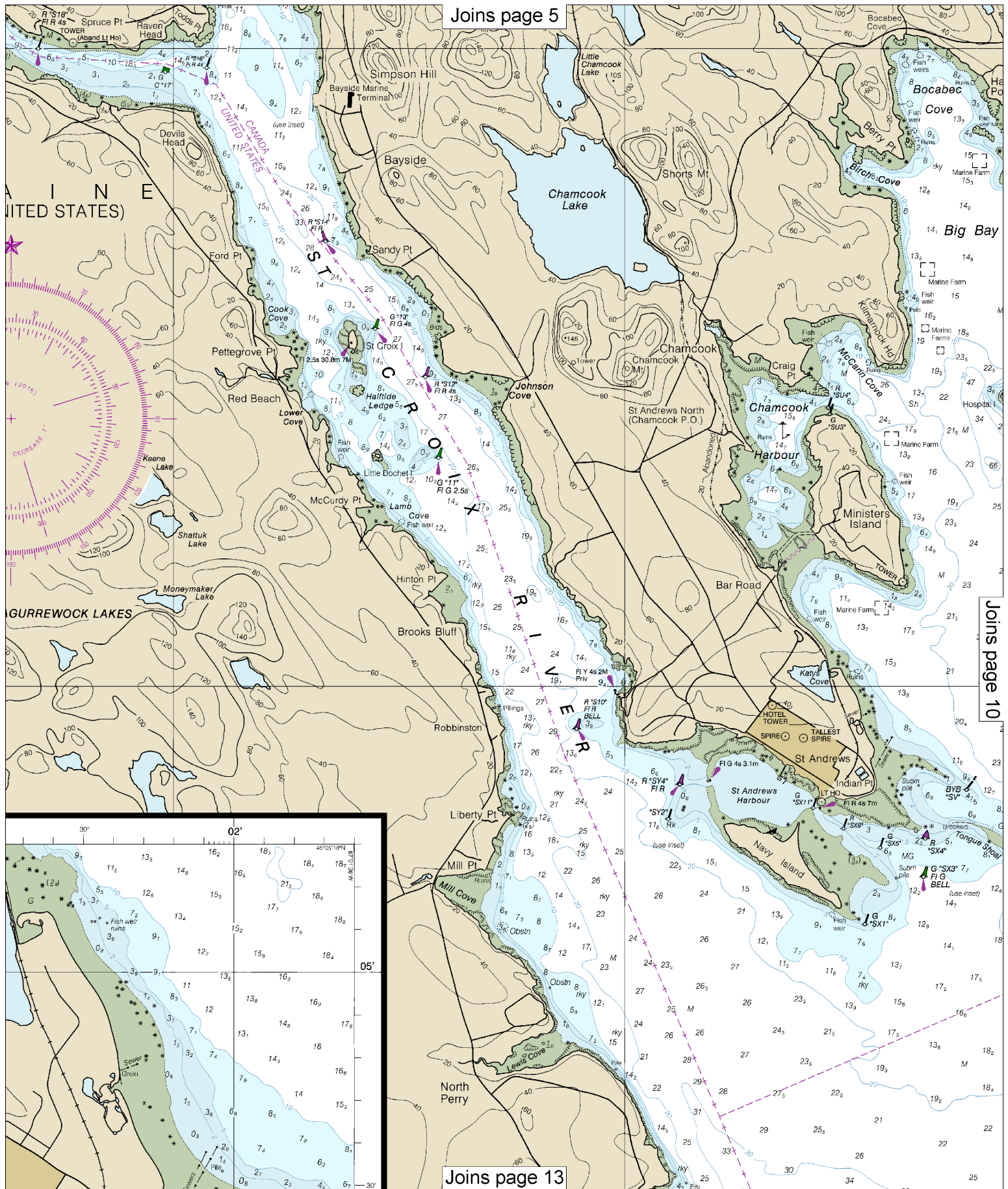
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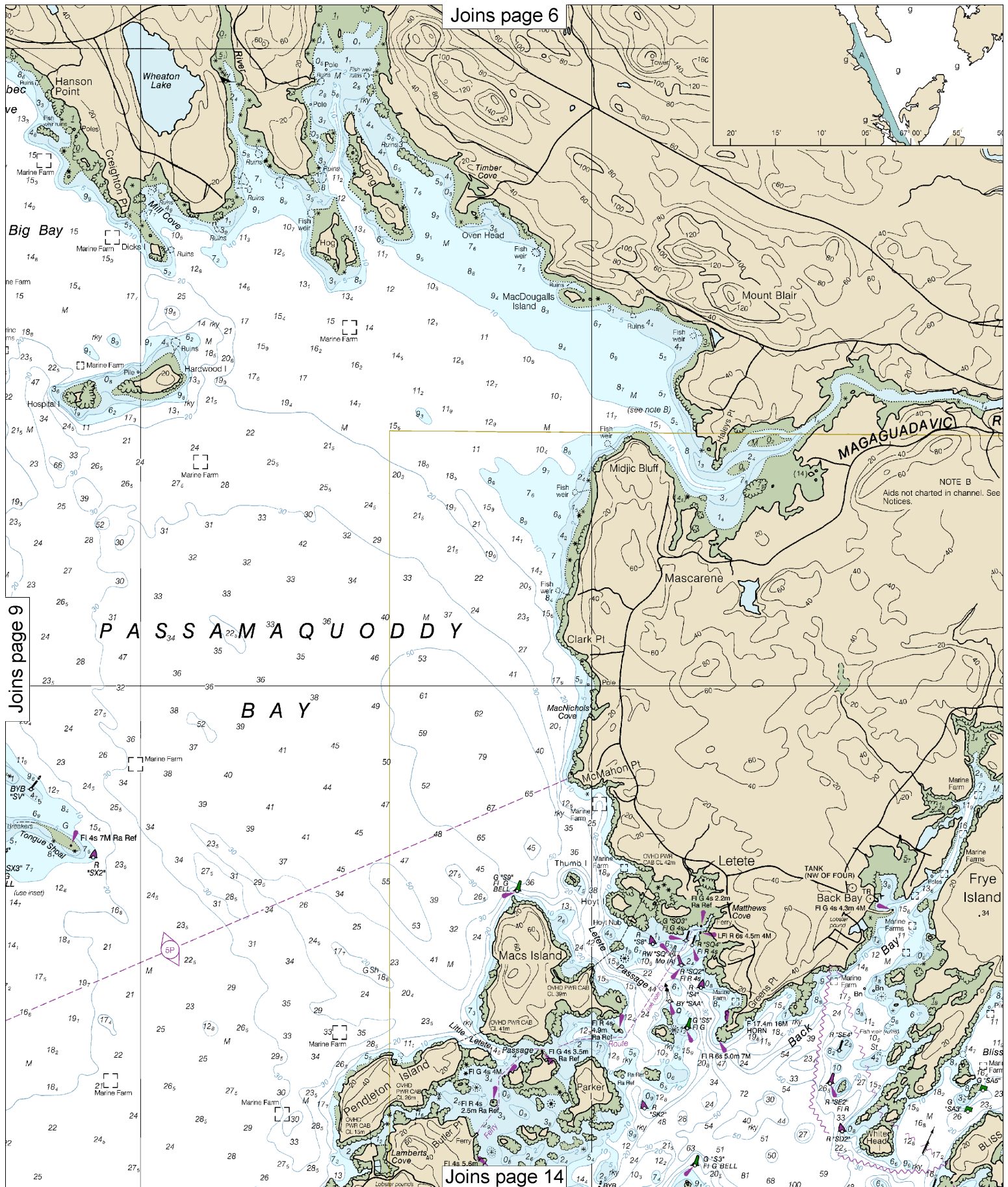
SCALE 1:50,000  
Nautical Miles

See Note on page 5.









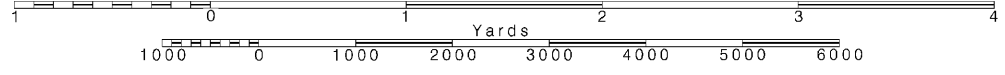
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:50,000

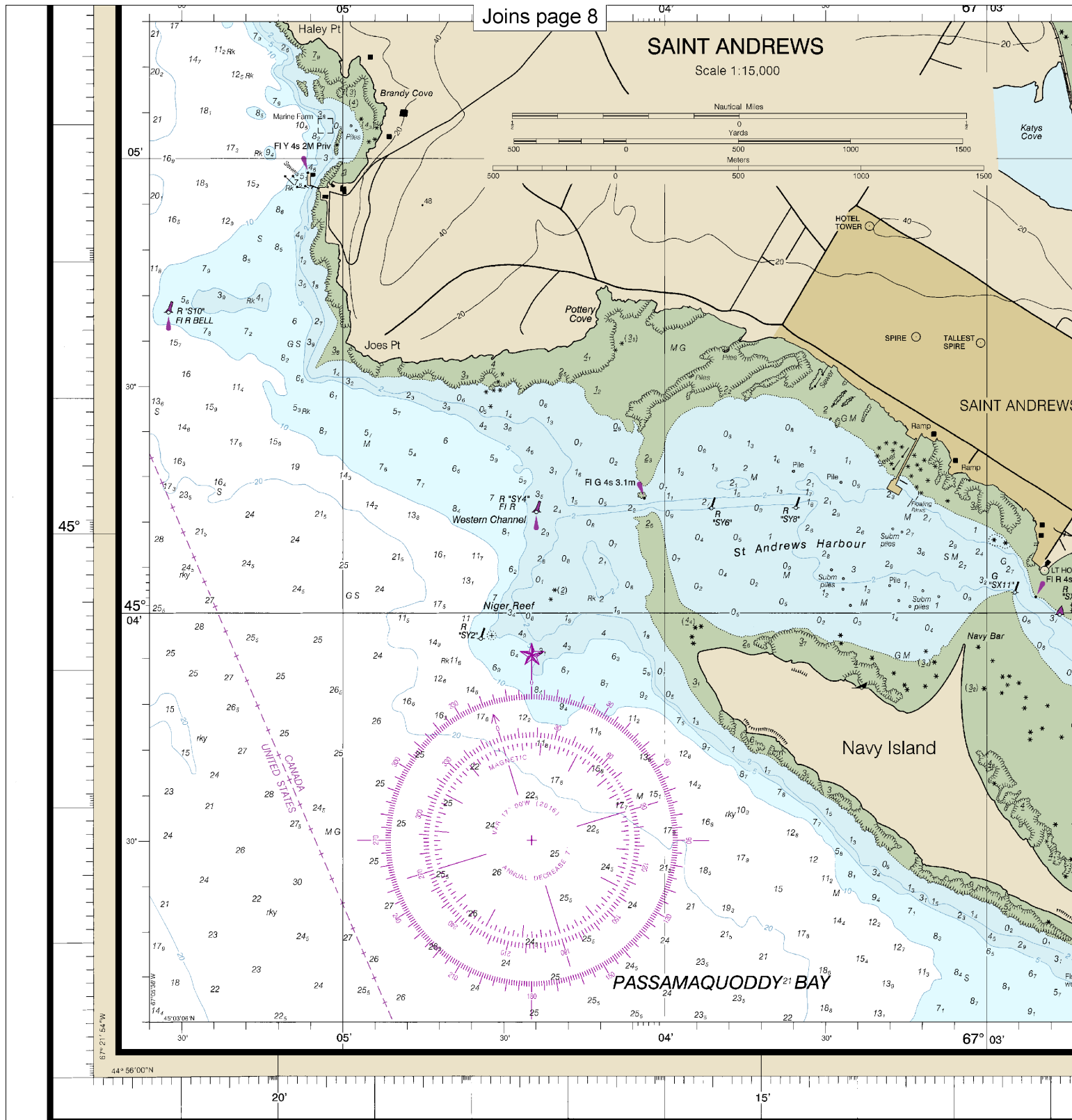
See Note on page 5.











4th Ed., Nov. 2012

13398

#### CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

Last Correction: 3/7/2016. Cleared through:  
LNM: 2516 (6/21/2016), NM: 2716 (7/2/2016), CHS: 0616 (6/24/2016)

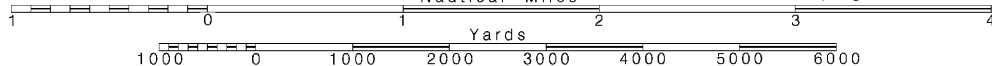
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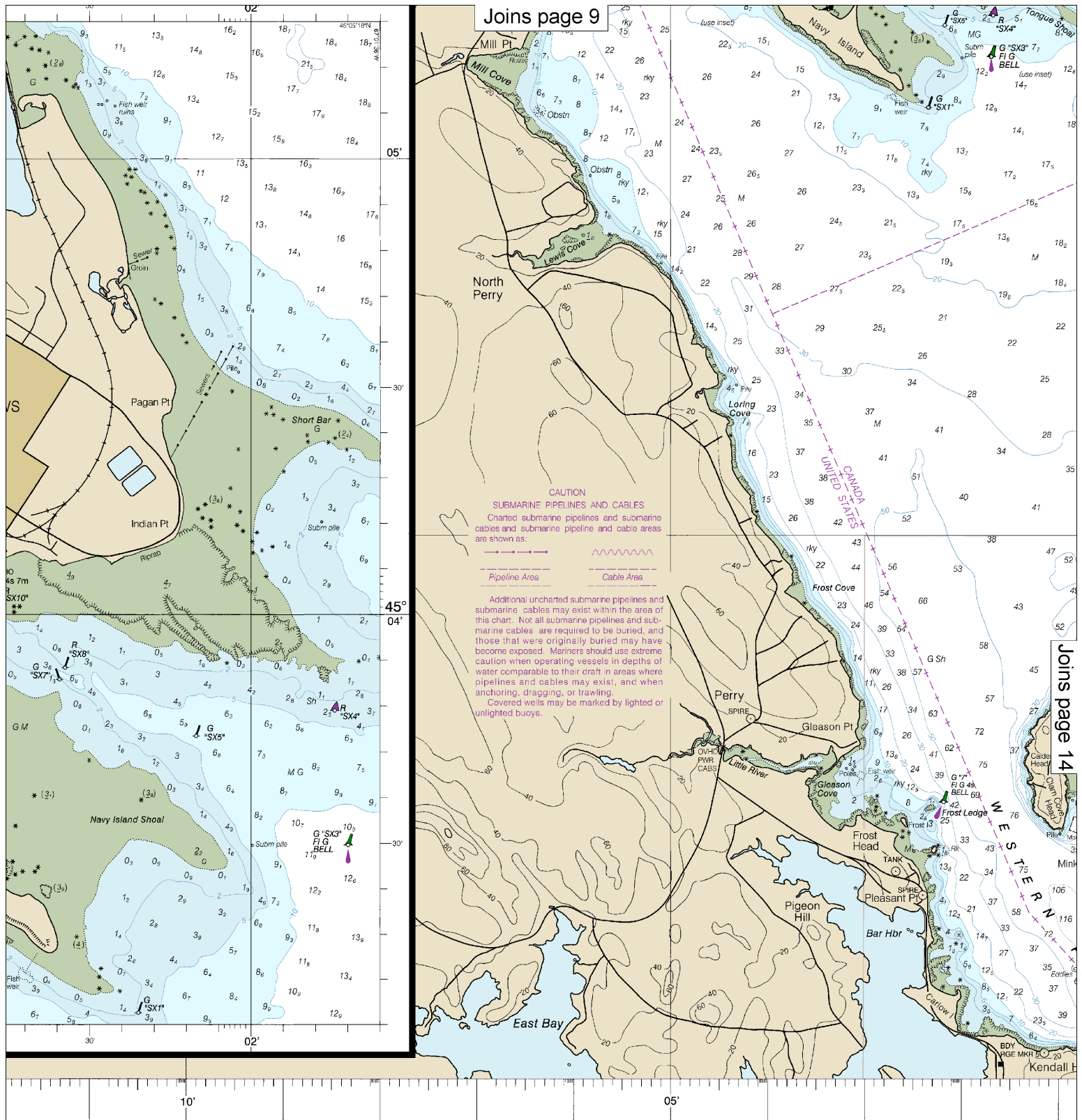
Note: Chart grid lines are aligned with true north.

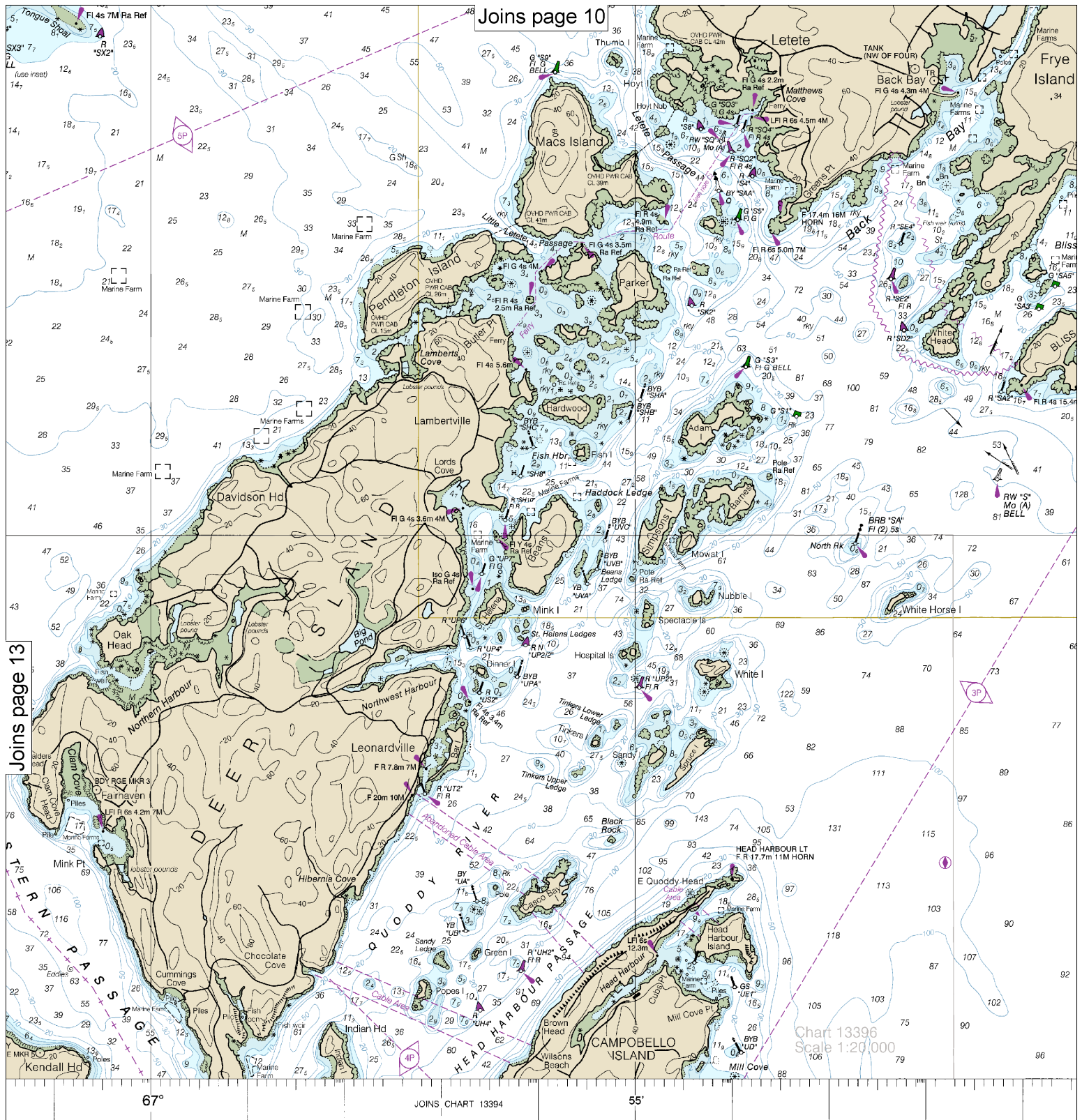
Printed at reduced scale.

SCALE 1:50,000  
Nautical Miles

See Note on page 5.







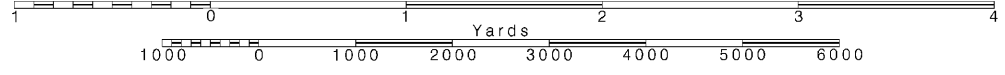
Published at Washington, D.C.  
DEPARTMENT OF COMMERCE  
COAST AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY

Note: Chart grid lines are aligned with true north.

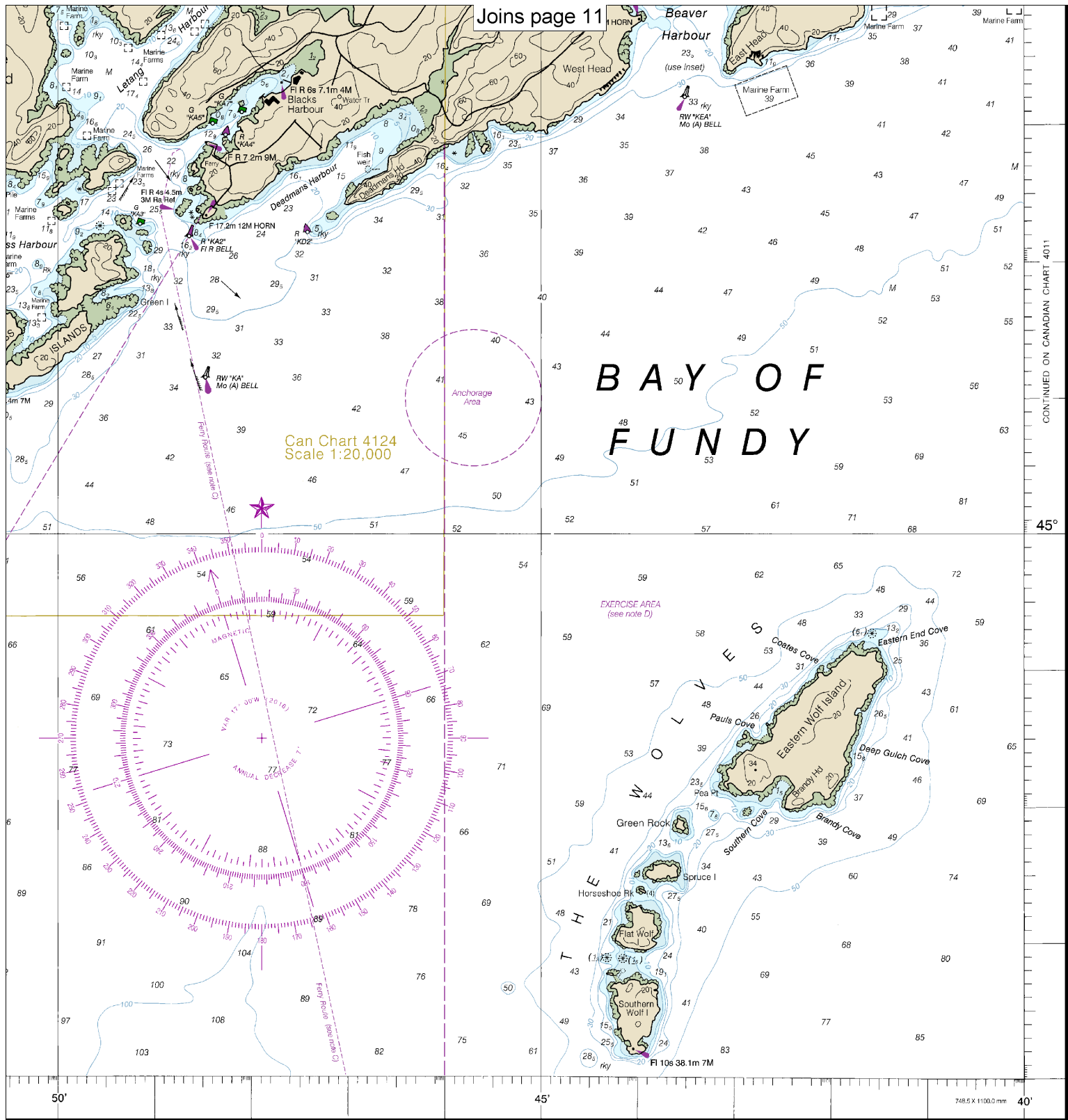
Printed at reduced scale.

Scale 1:50,000

See Note on page 5.







FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	0	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Passamaquoddy Bay and St. Croix River  
DEPTHS IN METERS - SCALE 1:50,000

13398



## VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

**Channel 16** – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 and 78A** – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

## Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

**HAVE ALL PERSONS PUT ON LIFE JACKETS!**



**NOAA Weather Radio All Hazards (NWR)** is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

## Quick References

Nautical chart related products and information	—	<a href="http://www.nauticalcharts.noaa.gov">http://www.nauticalcharts.noaa.gov</a>
Interactive chart catalog	—	<a href="http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml">http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml</a>
Report a chart discrepancy	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx">http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx</a>
Chart and chart related inquiries and comments	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs">http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs</a>
Chart updates (LNM and NM corrections)	—	<a href="http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html">http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html</a>
Coast Pilot online	—	<a href="http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm">http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm</a>
Tides and Currents	—	<a href="http://tidesandcurrents.noaa.gov">http://tidesandcurrents.noaa.gov</a>
Marine Forecasts	—	<a href="http://www.nws.noaa.gov/om/marine/home.htm">http://www.nws.noaa.gov/om/marine/home.htm</a>
National Data Buoy Center	—	<a href="http://www.ndbc.noaa.gov/">http://www.ndbc.noaa.gov/</a>
NowCoast web portal for coastal conditions	—	<a href="http://www.nowcoast.noaa.gov/">http://www.nowcoast.noaa.gov/</a>
National Weather Service	—	<a href="http://www.weather.gov/">http://www.weather.gov/</a>
National Hurricane Center	—	<a href="http://www.nhc.noaa.gov/">http://www.nhc.noaa.gov/</a>
Pacific Tsunami Warning Center	—	<a href="http://ptwc.weather.gov/">http://ptwc.weather.gov/</a>
Contact Us	—	<a href="http://www.nauticalcharts.noaa.gov/staff/contact.htm">http://www.nauticalcharts.noaa.gov/staff/contact.htm</a>



— For the latest news from Coast Survey, follow **@NOAAcharts**



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.